



## Final Product/Process Change Notification

Document #: FPCN21292XM

Issue Date: 14 Oct 2022

<b>Title of Change:</b>	Qualification of VHVIC3 Products to onsemi Aizu, Japan.		
<b>Proposed First Ship date:</b>	22 Jan 2023 or earlier if approved by customer		
<b>Contact Information:</b>	Contact your local onsemi Sales Office or <a href="mailto:Scott.Brow@onsemi.com">Scott.Brow@onsemi.com</a>		
<b>PCN Samples Contact:</b>	Contact your local onsemi Sales Office. Sample requests are to be submitted no later than 30 days from the date of first notification, Initial PCN or Final PCN, for this change. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.		
<b>Additional Reliability Data:</b>	Contact your local onsemi Sales Office or <a href="mailto:Tomas.Vajter@onsemi.com">Tomas.Vajter@onsemi.com</a>		
<b>Type of Notification:</b>	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change. onsemi will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact <a href="mailto:PCN.Support@onsemi.com">PCN.Support@onsemi.com</a>		
<b>Marking of Parts/ Traceability of Change:</b>	Product out of Aizu, Japan can be identified on the label by referring to the "Diffused In" location. If produced in Aizu, it will show JP, if produced in Gresham, it will show US.		
<b>Change Category:</b>	Wafer Fab Change		
<b>Change Sub-Category(s):</b>	Manufacturing Site Addition		
<b>Sites Affected:</b>			
<b>onsemi Sites</b>		<b>External Foundry/Subcon Sites</b>	
onsemi Aizu, Japan		None	
<b>Description and Purpose:</b>			
onsemi would like to notify its customers of the qualification of our Very High Voltage IC (VHVIC) Technology at our onsemi Aizu, Japan FAB. This qualification enables expanded capacity for this technology. All products listed in this FPCN may be dual sourced from either the current onsemi wafer FAB in Gresham, OR US or onsemi Aizu, Japan. This is the latest PCN associated with this change. This technology was previously qualified into Aizu and has been running at this FAB for > 5 years for other products in this technology. Reference <b>FPCN21292X-FPCN21292XL</b> for previous notifications on this equivalent change.			
	<b>Before Change Description</b>	<b>After Change Description</b>	
<b>FAB</b>	onsemi Gresham, USA	onsemi Aizu, Japan	onsemi Gresham, USA
There are no product material changes as a result of this change. There is no product marking change as a result of this change.			



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### Reliability Data Summary:

**QV DEVICE NAME:** NCP1236BD65R2G

**PACKAGE:** SOIC 8 (Less Pin 7)

**RMS#:** P31397, O30920

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta=125°C, 500V	1000 hrs	0/231
HTSL	JESD22-A103	Ta= 150°C	1000 hrs	0/231
PC-TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/231
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/231
PC-uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/693

**QV DEVICE NAME:** NCP1399AADR2G

**PACKAGE:** SOIC-16

**RMS#:** P31421

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta=125°C, 600V	1000 hrs	0/77

**QV DEVICE NAME:** NCP4304ADR2G

**PACKAGE:** SOIC-8

**RMS#:** P31423, O35972

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta=125°C, 200V	1000 hrs	0/231
HTSL	JESD22-A103	Ta= 150°C	1000 hrs	0/231
PC-TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/231
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/231
PC-uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/693

### Electrical Characteristics Summary:

Electrical characteristics are not impacted.



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### List of Affected Parts:

**Note:** Only the standard (off the shelf) part numbers are listed in the parts list. Any custom parts affected by this PCN are shown in the customer specific PCN addendum in the PCN email notification, or on the **PCN Customized Portal**.

Part Number	Qualification Vehicle
NCP4303ADR2G	NCP4304ADR2G
NCP1937A2DR2G	NCP1399AADR2G
NCP1937A3DR2G	NCP1399AADR2G
NCP1937B1DR2G	NCP1399AADR2G
NCP1937B3DR2G	NCP1399AADR2G
NCP1937B51DR2G	NCP1399AADR2G
NCP1937C4DR2G	NCP1399AADR2G
NCP1937C61DR2G	NCP1399AADR2G
NCP1240AD100R2G	NCP1236BD65R2G
NCP1239AD100R2G	NCP1399AADR2G
NCP1239AD65R2G	NCP1399AADR2G
NCP1239BD100R2G	NCP1399AADR2G
NCP1239BD65R2G	NCP1399AADR2G
NCP1239CD65R2G	NCP1399AADR2G
NCP1239DD100R2G	NCP1399AADR2G
NCP1239DD65R2G	NCP1399AADR2G
NCP1239ED100R2G	NCP1399AADR2G
NCP1239ED65R2G	NCP1399AADR2G
NCP1239FD65R2G	NCP1399AADR2G
NCP1239GD100R2G	NCP1399AADR2G
NCP1239HD65R2G	NCP1399AADR2G
NCP1239ID65R2G	NCP1399AADR2G
NCP1239RD65R2G	NCP1399AADR2G
NCP1239QD65R2G	NCP1399AADR2G
NCP1239PD65R2G	NCP1399AADR2G
NCP1239ND65R2G	NCP1399AADR2G
NCP1239MD65R2G	NCP1399AADR2G
NCP1239LD65R2G	NCP1399AADR2G
NCP1239KD65R2G	NCP1399AADR2G
NCP1239JD65R2G	NCP1399AADR2G